



Delaware Nutrient Management



The Delaware Nutrient Management Commission Technology Minutes of the Meeting Held February 7, 2006

In attendance:

<i>Committee Members Present</i>	<i>Others Present</i>
T. Keen, Technology Chair	J. Timmons
W. Vanderwende	G. Binford
<i>Committee Members Absent</i>	K. Foskey
R. Sterling	S. Hollenbeck
J. Manchester	C. Larimore
R. Baldwin	K. Bunting-Howarth
B. Schilling	K. Donnelly
C. West	B. O'Neill
<i>Ex-Officios Present</i>	P. Sample
W. Rohrer, Jr.	T. Garrahan

This meeting was properly notified and posted as required by law.

Call to Order/Welcome:

Chairman T. Keen called the meeting to order at 5:00 p.m. and welcomed everyone in attendance.

Approval of Minutes:

Since there was no quorum the minutes were not approved.

Discussion and Action Items:

Discuss Policy for Winter Fertilizer Applications:

W. Rohrer stated Nutrient Management received an informal complaint on a lawn care company located in Pennsylvania. The complaint was shared with the Commission at a previous meeting. It was reported about a month and a half ago. The informal complaint was in reference to fertilizer which had been applied on a Felton area yard mid-December. The company was careless with the application. After investigation, it had been determined they were not certified with the Nutrient Management Program. Also, it was discovered a common practice for the company to apply urea based fertilizer as late as December.

The Commission discussed their role as it pertains to commercial fertilizers and the lawn care business. The discussion expanded to encompass non-ag and manure. These topics have been discussed in a Rules and Regulations Subcommittee and Full Commission meeting. The Commission decided to bring these concerns to the Technology Subcommittee for the purpose of drafting regulatory language.

B. Rohrer referred to the 2/7/06 draft language for fertilizer handling (attached to minutes). Based on comments and concerns shared in the past, changes were made to the proposed draft. The initial draft was shared at the last Full Commission meeting. The 2/7/06 draft is presented for discussion.

B. Rohrer recommended adding the change to the certification regulations as this is where it would best fit. B. Rohrer read the draft for the record.

T. Keen stated his only concern is item two which refers to frozen surface. He noted this time of year there is little plant growth occurring for wheat and barley. T. Keen suggested defining frozen ground within the subsection. B. Vanderwende noted every winter is different year after year.

G. Binford stated there is evidence when small grains are starting to green up an application of nitrogen is needed. Discussion ensued as it pertains to the best time to apply nutrients.

B. O'Neill asked what the temperature needed to be in order for the small grain to take up nutrients. T. Keen stated his opinion is 50-55 degrees. B. O'Neill noted if temperatures are 60 degrees then the soil would not be 50-55 degrees. G. Binford noted the University of Delaware monitors soil temperatures and there have been days this winter reading over 60 degrees.

J. Timmons noted in the past NRCS applied nutrients to a small grains crop too early, the temperature went up and it started to rain. The farmer thought something was wrong with the nutrient because on the lower land the crop was green and on the higher land it was nitrogen deficient. They had to reapply the fertilizer on the higher land. They stopped custom applying nutrients because of this and started basing application on weather reports and the crop. J. Timmons stated it is important to know what type of turf grass is planted and the growth base. It is important to know this as it is hard to make a recommendation about how much nitrogen is needed without it.

G. Binford stated the goal of early application of nitrogen is to prevent tillering. B. O'Neill would like to separate ag from urban turf. Urban fertilization is occurring in December, January and February without any gain as the turf is not taking up any of the nutrients and therefore is lost. B. O'Neill noted that tillering for turf is the same as ag.

B. Rohrer recommended the following changes to the draft language:

- Under item four of the exemptions to add a subsection "c", "If the crop receiving fertilizer is in transition from dormancy to active photosynthesis would be exempt."
- Under item two, continue to sentence with "the surface area is frozen or covered by snow for a 24-hour or greater period." It could also be quantified as a 48-hour period.

T. Keen recommended including a maximum to the draft language:

- Up to one pound per thousand square feet or 40 lbs. of nitrogen.

B. Vanderwende noted there are two items being discussed, turf and small grain pointing out that one is for profit and one is not. G. Binford noted it is harder to justify applying nutrients to turf during this time of year because of this. B. O'Neill stated it is a waste of money to apply nutrients to turf this time of year. Discussion ensued as to the best dates to use as to when nutrients should not be applied.

B. Rohrer stated that past discussions went beyond commercial fertilizers. It had been discussed to include manure in the regulation. K. Donnelly stated he had some concerns with the proposed draft as it relates to stockpiling as it is contrary to what has been stated for the justification for stockpiling. It was noted stockpiling is preferred over winter application. T. Keen agrees with K. Donnelly's position.

K. Donnelly referred to item four, subsection "a" of the draft specifically, "deemed scientifically agronomical by the Nutrient Consultant". It is suggested to provide specific examples or list the science that would be considered acceptable. K. Donnelly stated his opinion is February 15 is mid-winter. B. Vanderwende agreed that most years it is. The other concern K. Donnelly shared is if there is an exemption for organic fertilizer someone could take the position and ask why other fertilizers cannot be

applied. This will place the Commission in the position to explain the differences. K. Donnelly stated the differences are not clear to him.

J. Timmons stated he is familiar with some research that shows there is great nutrient run-off utilizing no-till compared to conventional methods of turning nutrients into the soil. He further noted poultry litter will move much easier than fertilizer granules.

J. Timmons noted he is aware of a farmer who had over 1,500-tons of manure which created a storage issue. The farmer understood stockpiling outside was not an option as it would have been piled for over 90-days. J. Timmons further noted the farmer could not find anyone to take the litter. Therefore, he applied the excess litter between December 1 and February 1. There are times the only choice available is to spread the litter.

B. Rohrer stated most of the cases like the one shared by J. Timmons is due to the fact they did not look to the Nutrient Management Program, the poultry companies or other alternatives to address the excess litter problem. Perdue AgriRecycle and others are looking for litter. B. Rohrer recognizes the challenge however his experience has been the farmer had not provided a good faith effort to look for alternatives. When it has been identified a farmer has been applying litter, Nutrient Management shares best management practices and offers alternatives for the excess litter. Winter application of fertilizer on frozen ground is of concern.

K. Donnelly stated he will defer to the science. It would be hard to argue if the science supports winter application of fertilizer when the temperature is 50-60 degrees and the crop is green. G. Binford stated the only thing fertilizer would need to be applied to would be small grain.

T. Keen stated if manure is applied 30-days prior to planting and is incorporated there would be support for the application. He further noted it has been stated in the past it is better to utilize no till so particulate P does not end up in the ditch. In a no till situation, from a strictly agronomic standpoint, nitrogen needs to be applied to the crop earlier when it is incorporated. J. Timmons noted when litter is applied the soil must warm up. It is food for the bugs and they must become active. The food for the bugs is for energy. When the bugs start working on the litter they change it from an organic form to an inorganic form. Therefore, Nitrogen should be used to give the crop a kick.

B. Rohrer asked if the standard for commercial fertilizer and manure should be the same for both the ag and non-ag community. Also, should the changes discussed be included. W. Vanderwende stated that early application should be for liquid nitrogen or nitrogen on small grain and should not include manures.

B. Vanderwende stated that if it was a typical winter, application would not be discussed. B. Rohrer stated based on some complaints handled this winter fertilizer is being applied to clearly dormant yards. It is obvious this is the wrong practice, but the standards need to be strengthened. T. Keen prefers the regulations not be limited to nitrogen.

Based on the comments this evening, B. Rohrer will modify the draft and present them to Rules and Regulations or the Full Commission. If it is determined to make this a regulation there are a few other topics that Rules and Regulations would need to discuss. The process of regulations would not be ready until sometime in the summer. B. Rohrer stated he will proceed unless there are any objections. T. Keen agreed.

T. Keen asked if it would be a problem to move urban application to March 1. B. O'Neill stated his main concern is the non-ag community is applying nutrients to frozen ground. B. Vanderwende noted

there must be flexibility within the program. B. O'Neill stated there is no reason to apply fertilizer on turf after December 1 as there is no benefit. B. O'Neill suggested February 15 instead of February 1.

T. Keen stated the draft language needs to be forwarded to the Rules and Regulations Subcommittee.

Public Comments: NONE

Next Meeting: NONE

Adjournment:

Chairman Keen adjourned the meeting at 6:00 p.m.

Approved,

Tony Keen, Chair
Technology Subcommittee

BRR/mrp